

abdomen, forming a sort of border to this region. In the Indian race this part is somewhat lighter than the surrounding plumage, instead of being darker. Specimens from the northern parts of the peninsula are less albescent down the centre of the lower breast, and the sides of it are a pale, though sullied-looking, isabelline colour.

The nearest approach to the coloration of the Ceylonese bird is found, as one would naturally expect, in those from Travancore, which have the black of the throat descending a little more upon the breast than in northern specimens, and have the *inner webs* of the feathers, exactly down the centre of the breast, blackish brown; but this is all, and this trifling amount of nigrescent marking does not continue down to the white of the abdomen.

Pyctorhis nasalis, n. subsp.

The Ceylonese race of *Pyctorhis sinensis* has the nostril as black as the bill, there being no trace of the yellow colour round the nostril which characterizes birds from all parts of the Peninsula and Burmah. It is altogether a darker bird than the continental, the latter having the head reddish brown and the outer webs of the quills cinnamon or pale chestnut-red. A comparison of a fine series of Ceylonese with an equally good one of Indian examples shows me that the pale character is constant in the latter, and the dark coloration equally so in the former. The insular bird has the primaries margined externally with reddish brown, which imparts a very different appearance from that which is noticeable in the red closed wing of the Indian form. It is somewhat remarkable that such a peculiar distinction should exist as that which I have noticed in regard to this bird's nostril; and I therefore have proposed the above title for our race, which I think will be found to be a well-marked subspecies of the genus in question.

I trust that ere long these two birds will be figured by Mr. Keulemans's talented pencil in Part II. of the 'Birds of Ceylon.'

MISCELLANEOUS.

On the Genus Catagma.

To the Editors of the Annals and Magazine of Natural History.

GENTLEMEN,—Will you allow me to correct a mistake which occurs in my paper on the genus *Catagma* *? It is there stated that "no

* 'Annals,' ser. 5, vol. ii. p. 359.

known calcareous sponge possesses long curved and undulating uniaxial spicules." Any one who looks into Hæckel's monograph on the *Calcispongia* will see that such is far from being the case, several species of calcareous sponges possessing well-marked spicules of this form. My excuse is, that I was unable to consult Hæckel's work at the time of writing my paper, and that my last reference to it dates some four years back, when my interest in the *Calcispongia* was of a more general kind, and not directed to special points of detail.

With regard to the axial canals of calcareous spicules I may take the opportunity to add now that I have come across some large deciduous triradiate forms in which these canals have become much enlarged by solution, and are indeed almost as obvious as in the generality of deciduous siliceous spicules.

I am, Gentlemen,

Your obedient servant,

W. J. SOLLAS.

University College, Bristol,
Jan. 8, 1879.

On the new Palæozoic Plant-Group Dolerophylleæ.

By M. G. DE SAPORTA.

In April 1878 the author communicated to the Academy a note on a new genus of fossil Gymnosperms, for which he proposed the name of *Dolerophyllum*. It was founded in part on the existence of certain large conical buds referred by Göppert to the *Musaceæ*, and also upon leaves previously regarded as leaflets of *Nœggerathia* or of ferns, and clearly allied to *Doleropteris*, Grand-Eury. In the opinion of the latter, *Doleropteris*, *Rhacophyllum*, and *Aphlebia* constituted forms wavering between *Nœggerathia* and ferns, the true nature of which has still to be determined.

The author has now studied specimens of *Dolerophyllum* obtained from M. Grand-Eury and also those in the museum at Paris, where he had the cooperation of M. Renault, and he is preparing a memoir on the subject in conjunction with that gentleman. In the meantime he communicates the results of their joint studies.

The *Dolerophylla* constitute a group, probably an order, that of the *Dolerophylleæ*, equally distinct from the *Salisburyæ*, represented in the Carboniferous by *Gingkokophyllum*, and from the *Cordaiteæ*, to which, however, this order is somewhat allied by means of certain forms recently observed in America by Mr. Lesquereux.

The leaves of the *Dolerophylleæ*, hitherto generally confounded with the leaflets of the Neuropteroid ferns under the names of *Cardiopteris*, *Cyclopteris*, *Nephropteris*, and *Aphlebia*, are clearly separated from these by their structure. They are simple, sessile, broadly oval or orbicular, and auriculate at the base, thick, encircled by a cartilaginous border, and constantly present a great number of flabellato-dichotomous nervures, which diverge from the point of attachment and radiate towards the margin, often bifurcating several times. The epidermis was of considerable relative thickness,